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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,173	03/27/2002	Rainer Blum	50763	9725
26474	7590	10/01/2003	EXAMINER	
KEIL & WEINKAUF 1350 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			MCCLENDON, SANZA L	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/089,173	BLUM ET AL.	
	Examiner	Art Unit	
	Sanza L McClendon	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/27/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-15, 20, 22-25 and 27-34 is/are rejected.
- 7) ☒ Claim(s) 11, 16-19, 21 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-2, 7-8, 11-14, 20, 22 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "parent structure" in claims 1, 7-8, 12-14, and 20-21 is a relative term, which renders the claim indefinite. The term "parent structure" is not defined by the claim. It is unclear what type/kind of backbone and/or polymer the parent structure is deemed to be.

4. Claims 22 and 29 provides for the use of a solid composition or coating materials comprising said composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 22 and 29 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

5. Regarding claim 2, it is unclear if (b) is to be a reactive groups or a non-reactive group—see lines 8-9 and line 11.

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-10, 12-15, 20, 22-25 and 27-34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bayards et al (WO 99/14254).

Bayards et al teaches powder paint compositions. Said compositions comprise a solid unsaturated polyacrylate or an unsaturated polyester having an Mn between 800 and 5000 and a prepolymer crosslinker having an Mn higher than 400 and comprising unsaturated groups. Said unsaturated polyacrylate polymer can be prepared by the methods found on pages 6-8 and comprise (meth) acrylate functional groups. The crosslinker can be semi-crystalline or amorphous and linear—see pages 3 and 8. The crosslinker can be a functional polyacrylate, polyester, polyurethane, polyolefin or epoxy resin having urethane linkages and ethylenic unsaturation and a melting point generally lies between 25 °C and 100 °C, preferably between 50 and 120 °C—see page 3. In addition an optional second crosslinker that can be solid or liquid can be added. Said second crosslinker comprises ethylenic unsaturation, such as (meth) acrylate unsaturation and can be unsaturated urethane (meth) acrylates, unsaturated polyester (meth) acrylates, unsaturated epoxy (meth) acrylates, and unsaturated polyether (meth) acrylates—see page 12. Additionally the powder coatings can comprise resins, photoinitiators, flow agents, and pigments—page 14. The powder coating composition is curable using UV or EB radiation at temperatures ranging from 40 °C to 120 °C and can be mixed using solvents, in the melt or in a

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static mixer. Bayards et al teaches after application of said powder coating to a substrate, the powder paint is molten at temperatures ranging from 40 °C to 170 °C by exposure to infra-red radiation or being placed in an oven, after which can be cured under UV or EB radiation with an optional post-heating step. Said substrates include metal, plastics, wood, paper, and glass if the melting point of the binder system is low enough—pages 14-16.

Bayards et al does not expressly teach the polydispersity of the solid unsaturated polyacrylate or unsaturated polyester polymer, however applicant has not established the criticality of said polydispersity for patentability. The examiner contends that any such polydispersity could have worked equally as well. Therefore in the absence of unexpected results or evidence to the contrary the compositions of Bayard's et al anticipates, or in the alternative, renders applicant's invention obvious because Bayards et al teaches the same composition as found in the invention of claims 1-10, 12-15, 20, 22-25, and 27-34.

Allowable Subject Matter

9. Claims 11, 16-19, 21, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a solid composition in which a component has a melt viscosity as defined in claim 11. The prior fails to teach a solid composition wherein a chemical stabilizer, such as HAL, or photoinitiators and/or photocoinitiators are chemically bonded to any component therein or using an unsaturated polyester resin as defined by claim 26.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

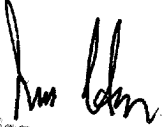
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

Sanza L McClendon

Examiner

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SMc


James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700